

eye.

63. (New Claim) The intraocular lens of claim 57 wherein the lens body is adapted to be placed in a posterior chamber of the eye.

64. (New Claim) The intraocular lens of claim 57 wherein the lens body is deformable for insertion through a small incision into the eye.

REMARKS

The above-identified application has been carefully reviewed in light of the Examiner's communication mailed November 4, 2002.

Claims 26 to 45 have been canceled without prejudice. Applicant respectfully reserves the right to seek patent protection based upon these claims or similar claims in one or more later filed related applications.

New claims 46 to 64 have been added and are directed to embodiments for which patent protection is sought. These new claims have been presented to more clearly define the present invention and to facilitate the prosecution of the above-identified application. These new claims are fully supported by the present specification and drawings as filed. For example, Fig. 3 shows the differences in corresponding optical add powers between an intraocular lens in accordance with the present invention (solid line power curve) relative to a substantially identical intraocular lens adapted for placement in an identical eye in which the natural lens has been removed (dashed line power curve).

Previous claims 25 to 46 have been rejected under 35 U.S.C. 102 (e) as being anticipated by Portney. Claims 26 to 32 and 37 to 43 have been rejected under 35 U.S.C. 102(e) as being anticipated

by Menezes et al. Claims 33 to 36, 44 and 45 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Menezes et al in view of Portney. Applicant traverses each of these rejections as it pertains to new claims 46 to 64.

The present invention is directed to intraocular lenses for use in mammalian eyes including natural lenses having natural accommodative capability.

In new independent claim 46, the intraocular lens comprises a single, unitary multifocal lens body sized and adapted for placement in such a mammalian eye. The lens body has a baseline optical power and a plurality of annular regions each having an optical add power, preferably a different optical add power. The lens body has a first optical add power for near vision, the first optical add power having a magnitude which, together with the natural accommodative capability of a natural lens, provides enhanced vision. The lens body further has a second optical add power intermediate between the first optical add power and the baseline optical power. In one useful embodiment (claim 49), each of the different optical add powers of the plurality of annular regions of the lens body is reduced relative to the corresponding optical power of a substantially identical intraocular lens adapted for placement in an identical eye in which the natural lens has been removed.

In independent claim 56, an intraocular lens is provided which comprises a single, unitary multifocal lens body sized and adapted for placement in such a mammalian eye, that is a mammalian eye including a natural lens having a natural accommodative ability. The lens body has a plurality of regions each having a different optical power including a region having a baseline optical power, a region having a maximum optical add power and a region having an additional optical add power intermediate between the maximum optical add power and a baseline optical power. The maximum

optical add power has a magnitude so as to provide, in combination with the natural accommodative capability of the natural lens, enhanced vision. Each of the maximum optical add power and the additional optical add power is reduced by at least about 10% relative to the corresponding optical add power of a substantially identical intraocular lens adapted for placement in an identical eye in which the natural lens has been removed.

Portney discloses a corrective intraocular lens system including a primary intraocular lens for implanting into an individual's aphakic or phakic eye. Portney discloses that the primary intraocular lens includes a recess in its anterior surface so that a corrective secondary intraocular lens can be attached to the primary lens.

Portney does not disclose, teach or suggest the present invention. For example, Portney does not disclose, teach or even suggest a single, unitary lens body having a baseline optical power, a first optical add power for near vision or a maximum optical add power, and a second or additional optical add power intermediate between the first or maximum optical add power and the baseline optical power, as recited in the present claims. Portney discloses a system including two separate lens bodies attached together. Thus, Portney actually teaches away from a single, unitary lens body, as recited in the present claims.

In view of the above, applicant submits that claims 46 to 64 are not anticipated by, and are unobvious from and patentable over, Portney under 35 U.S.C. 102(e) and 103(a).

Menezes et al discloses concentric lens designs for astigmatic presbyopes which comprise at least one surface which has a circular central portion and a plurality of concentric annular rings with three separate optical powers: a basic distance power; a near add power; and a cylinder correction power. Menezes et al discloses that some patients may not require the full cylindrical and add

powers of the lenses and that, for these cases, the cylindrical and near powers can be made a fraction, preferably 50%, of the full cylinder or add power.

Menezes et al does not disclose, teach or suggest the present invention. For example, Menezes does not disclose, teach or even suggest a single, unitary lens body having a baseline optical power, a first or maximum optical add power, and a second or additional optical add power intermediate between the first or maximum optical add power and the baseline optical power, as recited in the present claims. Menezes et al does not even suggest the presence of two different add powers in any of the lenses disclosed. The table at column 5 of Menezes et al refers to the number of zones present on each lens, not the relative optical power of each zone. Further, the emphasis Menezes et al places on correcting astigmatism leads one skilled in the art away from employing multiple add powers, which are not disclosed or suggested by Menezes et al.

In view of the above, applicant submits that all the present claims, that is claims 46 to 64 are not anticipated by, and are unobvious from and patentable over, Menezes et al under 35 U.S.C. 102(e) and 103(a).

As noted above, each of Menezes et al and Portney are substantially deficient with regard to the present claims. Neither of these references even suggests an intraocular lens comprising a single, unitary lens body having a baseline optical power, a first or maximum optical add power, and a second or additional optical add power intermediate between the first or maximum optical add power and the baseline optical power, as recited in the present claims. Portney actually teaches away from the present invention. There is no motivation or incentive to one of ordinary skill in the art to combine the teachings of Menezes et al and Portney, let along to do so and obtain the present invention.

In view of the above, applicant submits that all of the present claims, that is claims 46 to 64, are unobvious from and patentable over Menezes et al in view of Portney under 35 U.S.C. 103(a).

Claims 26 to 32 and 37 to 43 have been provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 26 to 39 of co-pending application No. 09/302,977.

Applicant notes that the rejected claims have been canceled, without prejudice, and replaced by claim including new wording and features. Moreover, claims 26 to 39 of co-pending application 09/302,977 have been canceled. The present claims do not claim the same invention as claimed in co-pending application Serial No. 09/302,977.

Therefore, applicant respectfully requests that the double patenting rejection under 35 U.S.C. 101 be withdrawn.

Claims 26, 27, 32 to 38 and 43 to 45 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 4, 6, 8, 10, 12 to 14, 17, 19 and 21 of co-pending application No. 09/302,977; claims 1, 9, 15 and 19 of co-pending application No. 09/565,036; claims 1, 11, 14, 19, 26 and 30 of co-pending application No. 09/564,317; and claims 1, 14, 24 and 26 of co-pending application No. 09/564,123. Applicant traverses each of these rejections.

With regard to co-pending application No. 09/302,977, applicant submits that none of claims 1, 3, 4, 6, 8, 10, 12 to 14, 17, 19 and 21 remain in this co-pending application and, therefore, will apparently not be patented in this co-pending application.

In view of the above, applicant respectfully requests that this obviousness-type double patenting rejection be withdrawn.

The claims in co-pending application Serial No. 09/565,036 are

directed to intraocular lenses or ophthalmic lens systems including at least one multifocal optic having a maximum add power which is less than the add power required for full near vision for a pseudophakic eye, that is an eye in which the natural lens has been removed, and a movement assembly coupled to the optic and adapted to cooperate with the eye of a patient to effect accommodating movement of the optic in the eye. In contrast, the present claims are directed to intraocular lenses for use in an eye including a natural lens. Moreover, the present claims do not recite the presence of a movement assembly coupled to the optic, as recited in the claims of co-pending application No. 09/565,036.

Thus, the present claims are substantially different and patentably distinct from the claims of co-pending application Serial No. 09/565,036.

In view of the above, applicant respectfully requests that the obviousness-type double patenting rejection based on the claims of co-pending application Serial No. 09/565,036 be withdrawn.

The claims of co-pending application Serial No. 09/564,317 and application Serial No. 09/564,123 are directed to ophthalmic lens systems, for example intraocular lens systems including two multifocal ophthalmic lenses, one for use in each eye of a patient. Such lens systems are in contrast to the single intraocular lens including a single, unitary multifocal lens body, as recited in the present claims.

Applicant submits that the present intraocular lens claims and the system claims of co-pending application Serial No. 09/564,317 and co-pending application Serial No. 09/564,123 are mutually patentably distinct.

In view of the above, applicant respectfully requests that the obviousness-type double patenting rejections based on co-pending application Serial No. 09/564,317 and co-pending application Serial No. 09/564,123 be withdrawn.

Further, with regard to the obviousness-type double patenting rejections regarding co-pending applications Serial No. 09/565,036; 09/565,317; and 09/564,123, the above-identified application was filed before each of the co-pending applications. Under current law, there is substantially no likelihood that allowing the above-identified application to issue without the Terminal Disclaimers impliedly suggested by the rejections would extend the period of exclusivity of a patent obtained from the above-identified application. For this additional reason, applicant requests that each of the obviousness-type double patenting rejections be withdrawn.

Applicant would be willing to reconsider the obviousness-type double patenting rejection based on co-pending application Serial No. 09/302,977 once claims in both this co-pending application and the above-identified application have been indicated as being allowed or allowable.

Each of the present dependent claims is separately patentable over the prior art. For example, none of the prior art, taken singly or in any combination, disclose, teach or even suggest the present intraocular lenses including the additional feature or features recited in any of the present dependent claims. Therefore applicant submits that each of the present claims is separately patentable over the prior art.

Applicant submits that each of the present claims is separately patentable over the prior art.

In conclusion, applicant submits that the present claims are not anticipated by and are unobvious from and patentable over the prior art under 35 U.S.C. 102 and 103. Therefore, applicant submits that claims 46 to 64 are allowable and respectfully

D-2821CON  
17285CON

12

requests the Examiner to pass the above-identified application to issuance at an early date. Should any matters remain unresolved, the Examiner is requested to call (collect) applicant's attorney at the telephone number given below.

Respectfully submitted,



Frank J. Uxa  
Attorney for Applicant  
Reg. No. 25,612  
4 Venture, Suite 300  
Irvine, CA 92618  
(949) 450-1750  
Facsimile (949) 450-1764

FJUxa/ac